**Spatial Modeling in Fisheries Economics Workshop**
**National Marine Fisheries Service**
**Tuesday, October 22, 2002**
**Silver Spring, MD**

## Overview

The issuance of Executive Order 13158, which called for the national development of a network of marine protected areas (MPAs), has compelled fishery managers and fishery scientists to think more critically about the objectives and effects of spatial management of marine fisheries. A recent study by the National Research Council identified four potential objectives for MPAs: conserve biological or habitat diversity; manage fisheries; provide ecosystem service; and protect cultural heritage. The diversity of these goals is indicative of the wide spectrum of potential impacts and impacted parties that arise when a MPA is implemented. However, while much research has focused on the biological and ecological impacts associated with MPAs, relatively little attention has been paid to the economic benefits or how these benefits will be distributed across society. The increased reliance on marine-managed areas to govern fisheries coupled with the mandated economic analyses that must be conducted to implement fishery regulations, however, compels management agencies to address this gap and develop a framework for analyzing the costs and benefits generated by the creation of MPAs.

To a limited degree, existing econometric methods have already been applied to measure the cost on the regulated entity from restricting fishing grounds. However, fishery applications have been limited and modeling issues remain. Recently, a new class of economic models that enable an integrated assessment of marine systems has begun to emerge. These models are typically an extension of current models but directly incorporate the biological processes of the marine system, including stock and habitat effects, to more fully evaluate the costs and benefits derived from MPAs and other spatially-defined fishery regulations.

NOAA Fisheries is pleased to convene this workshop that brings together recent and emerging economic research to begin to lay the groundwork for developing the conceptual and empirical framework for the economic analysis of spatial policies in marine fisheries.

## Who Should Attend

The broad scope of papers to be presented at this workshop makes it a worthwhile choice for fishery policy makers, applied fishery economists, and others interested in ecosystem management.

## Location

The workshop will be held at the Holiday Inn in Silver Spring, MD (800-465-4329 / 301-589-0800). A block of 75 rooms has been reserved for workshop participants under the title "National Marine Fisheries Service." Reservations for hotel rooms must be made by **September 21, 2002**.

## Registration & Contact Information

To register, please contact Rita Curtis, NOAA Fisheries, at 301-713-2328 or via email at Rita.Curtis@noaa.gov.

# NOAA Fisheries Office of Science & Technology
# Spatial Modeling in Fisheries Economics Workshop
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8:30 Reception

8:45 Opening Remarks. *Rebecca Lent, NOAA Fisheries*

9:00 Spatial Management of Fisheries. *James Wilen, University of California, Davis*

9:45 A Bioeconomic Analysis of Marine Reserves: The role of dispersal, connectivity, and site selection. Jim Sanchirico, Resources for the Future.

10:30 Break

10:45 Spatial Fishery Property Rights and Marine Zoning: A Discussion with Reference to Management of Marine Resources in New England. *Dan Holland, University of Massachusetts - Dartmouth*

11: 30 The California Rockfish Conservation Area and Groundfish Trawlers at Moss Landing Harbor. *Michael Dalton, California State University, Monterey Bay.*

Lunch

1:30 Economic Heterogeneity in the Atlantic and Gulf of Mexico Longline Fishery. *Ivar Strand, University of Maryland.*

2:10 Incorporating Information and Expectations in Fishermen's Spatial Decisions, *Rita Curtis, NOAA Fisheries and Ted McConnell, University of Maryland.*

2:45 Measuring the Costs from Essential Fish Habitat Designations. *Rob Hicks, College of William & Mary; Jim Kirkley, Virginia Institute of Marine Science; and Ivar Strand, University of Maryland.*

3:15 Break

3:30 Spatial Management in Fisheries: Lessons from Empirical Bioeconomics. *Martin Smith, Duke University.*

4:15 Valuation of the Benefits from Improving and Protecting Oyster Reefs and Habitats in the Chesapeake Bay. *Tim Haab, Ohio State University; Rob Hicks, College of William & Mary; and Doug Lipton, University of Maryland.*